

SFUND RECORDS CTR 88083848

March 19, 1996

DCN: S09-SAI-21089PZZ-01-EP-02925

Ms. Karen Nelson (H-8-4)
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street, 8th Floor
San Francisco, CA 94105

Re:

EPA Contract No. 68-W4-0021; EPA Work Assignment No. 21-08-9PZZ

SAIC Project No. 05-5026-03-8732; EPCRA

Return of Texaco Multimedia Compliance Investigation Report

#### Dear Karen:

As Lauren Volpini requested, enclosed is the Texaco Multimedia Compliance Investigation report, dated September 1995, and the three draft appendices, dated June 1995. We have not retained a copy. Mary Wesling in my office used post-it notes to tag pages of particular interest. Also enclosed is a copy of the draft request for information (RFI) questions that we prepared for Lauren's review.

Mary is taking the lead in my office on this matter. She will return from vacation on April 1, 1996. In the meantime, please feel free to give me a call at 399-0140 if you have any questions.

Sincerely,

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

Edwin Oyarzo

Work Assignment Manager

cc:

L. Volpini, EPA Work Assignment Manager

M. Wesling, SAIC Work Assignment Manager

C. Baker, SAIC Document Control Officer

Lauren V.



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

**REGION IX** 

75 Hawthorne Street San Francisco, CA 94105-3901

March 20, 1996

CERTIFIED MAIL NO. Z 695 244 296 RETURN RECEIPT REQUESTED

Mr. Alfred C. DeCrane President Texaco, Inc. 2000 Westchester Ave. White Plains, NY 10650-0001

Dear Mr. DeCrane:

According to information submitted by Texaco, Inc. ("Texaco") in response to the information request ("Section 114 letter") dated October 19, 1994 by the United States Environmental Protection Agency, Region 9 ("EPA"), Texaco constructed or modified equipment at its Bakersfield, California refinery (the "facility"), including the reformulated diesel fuel project in 1993 and associated projects in 1991 through 1992 called the "Sulfur Recovery Unit No. 3 Project" and "Heavy Crude Expansion Project." This facility is subject to air pollution control requirements that are part of the federally-approved and federally-enforceable State Implementation Plan ("SIP") for California. The SIP was promulgated pursuant to Section 110 of the Clean Air Act, 42 U.S.C. §§ 7401-7671q (the "Act").

For purposes of requests 1-8 of this information request, the terms "emissions unit," "construction," and "begin actual construction" are defined in 40 C.F.R. § 51.165(a)(1). The term "modification" shall mean any physical change in, or change in the method of operation of, any source that would result in an emissions increase or decrease of any pollutant subject to regulation under the Act.

We have reviewed Texaco's response to the Section 114 letter and concluded that additional information is necessary to determine whether Texaco has been and is in compliance with certain provisions of the SIP and NSPS for new equipment or modified existing equipment at the facility. Therefore, pursuant to the authority of Section 114(a) of the Act, EPA requires Texaco to provide the following documents and information.

1. Provide a list of all construction of new emissions units and all modifications of existing emissions units at the

facility that are associated with the Sulfur Recovery Unit No. 3 and Heavy Crude Expansion Projects.

- 2. Provide a general description of the Sulfur Recovery Unit No. 3 and Heavy Crude Expansion Projects, and process flow diagrams for all emissions units associated with these projects (including all air pollution control equipment).
- 3. Provide copies of all draft or final Authorities to Construct ("ATCs") which were issued to Texaco by either the Kern County Air Pollution Control District or San Joaquin Valley Unified Air Pollution Control District (the "District") for the construction or modification of any emissions units associated with the Sulfur Recovery Unit No. 3 and Heavy Crude Expansion Projects. Provide a copy of all documents relating to any draft or final ATC including, but not limited to, any applications for ATCs, any ATCs proposed or issued, any conditions attached to each ATC, any correspondence between Texaco and the District, any correspondence between Texaco and a third party (such as a contractor), any internal documents at Texaco, and any engineering evaluations of ATC applications done by the District.
- 4. For existing emissions units that were modified as part of the Sulfur Recovery Unit No. 3 and Heavy Crude Expansion Projects, provide copies of the most current ATCs and permits to operate ("PTO") issued by the District for those emission units prior to the modification.
- Provide a copy of all documents relating to any application 5. by Texaco to the District or to the District Hearing Board for a variance, a temporary PTO, a change in a construction schedule, or a compliance plan for any emissions unit associated with the Sulfur Recovery Unit No. 3 and Heavy Crude Expansion Projects, including, but not limited to, Texaco's applications and supporting documents, any analysis done by the District of the application, any District inspection report(s), Notice(s) or Finding(s) of Violation that preceded Texaco's applications, any correspondence between Texaco and the District regarding the applications, any documents that estimate or analyze the amount by which emissions from the facility exceed or have exceeded the emissions allowed under applicable District rules and/or permits, and any action by the District or the District Hearing Board concerning the applications.
- 6. For each new or modified emissions unit listed in request #1 above:

- a. Identify any associated air pollution control equipment and the type of air pollutant controlled. Provide vendor information concerning the removal efficiency of all air pollution control equipment identified.
- b. Provide both controlled and uncontrolled emissions estimates in terms of pounds per hour and tons per year for all emissions units. Emissions shall be estimated based upon the maximum rated capacity of each emissions unit operating 24 hours per day, 365 days per year. If Texaco has had emissions testing done on any emissions unit, provide a copy of the results of the testing.
- c. For each modified emissions unit, provide actual emissions data in terms of pounds per hour and tons per year for the five year period immediately preceding the date of the ATC application by Texaco to the District for that unit.
- d. State the date that Texaco began actual construction of each new or modified emissions unit.
- e. State the date that Texaco began operation of each new or modified emissions unit.
- 7. Provide a description of, and a copy of all documents relating to, all fees and penalties paid by Texaco to the District to resolve or settle any disputes relating to a variance or a Notice or Finding of Violation issued by the District concerning emissions units associated with the Sulfur Recovery Unit No. 3 and Heavy Crude Expansion Projects. This includes, but is not limited to, excess emission fees, permit fees, filing fees, civil penalties, and criminal penalties. Identify the amount paid, the date of payment, and the violation(s) or disputes resolved by the fee or penalty.
- 8. Provide a copy of all documents relating to external emissions offsets or internal facility emissions reductions used by Texaco to offset emissions from emissions units associated with the Sulfur Recovery Unit No. 3 and Heavy Crude Expansion Projects. Provide in this response any correspondence between Texaco and the District concerning offsets or emission reductions, any correspondence between Texaco and a third party, any internal documents at Texaco, and any engineering evaluations of offset or emission reduction requirements done by Texaco, the District, or a contractor on behalf of Texaco or the District.

9. State whether an Environmental Impact Report ("EIR") or negative declaration was prepared for the Sulfur Recovery Unit No. 3 and Heavy Crude Expansion Projects at the facility under the California Environmental Quality Act. Provide a copy of the draft EIR and the final EIR or the negative declaration.

The Administrator of the EPA has also promulgated various New Source Performance Standards ("NSPS") for equipment used in petroleum refineries. These NSPS requirements are codified at Title 40 of the Code of Federal Regulations ("C.F.R."), Part 60. NSPS Subparts which may apply to equipment in petroleum refineries include, but are not limited to, Subpart A (General Provisions), Subpart H (Standards of Performance for Sulfuric Acid Plants), Subpart J (Standards of Performance for Petroleum Refineries), Subpart GG (Standards of Performance for Stationary Gas Turbines), Subpart GGG (Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries), and Subpart QQQ (Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems).

For purposes of this information request relating to NSPS applicability, the terms "commenced," "construction," "modification," and "startup" are defined in 40 C.F.R. § 60.2. The term "affected facility" is defined in 40 C.F.R. § 60.2, and the affected facilities are identified in the applicable NSPS Subpart. For purposes of the information requests relating to the refinery wastewater system (numbered 10-14), the terms "active service," "aggregate facility," "catch basin," "individual drain system," "junction box," "oil-water separator," "oily wastewater," "wastewater system," and "water seal controls" are defined in 40 C.F.R. § 60.691.

- 10. List and describe each individual drain system, oil-water separator, and aggregate facility which commenced construction, modification, or reconstruction between May 4, 1987, and January 1, 1988. For each affected facility, list the date that construction commenced and startup began.
- 11. Identify all equipment and systems that you claim are excluded from Subpart QQQ under 40 C.F.R. § 60.692-1, and provide the basis for your claim.
- 12. Identify each modified or reconstructed individual drain system that has a catch basin in the existing configuration prior to May 4, 1987. For each system identified, state whether refinery wastewater is routed through new process drains and a new first common downstream junction box, either as part of a new or an existing individual drain system.

- 13. Provide the following information for the affected facilities of the refinery wastewater system at the facility, which were listed in response to request #10 or in response to request #10 of EPA's Section 114 letter dated October 19, 1994:
  - a. Provide detailed design specifications including schematics, and piping and instrumentation diagrams of all control equipment (with manufacturer's design specifications), each process drain, and associated junction boxes, sewer lines, oil-water separators, and closed vent systems, relating to the affected facility. Indicate which parts are new and which existed prior to May 4, 1987.
  - b. Describe the operation of each affected drain in relation to associated process units, junction boxes and sewer lines including, but not limited to:
    - i. the generation and/or origin of the discharged or transported process wastewater, received by and through each drain;
    - ii. the VOC content and composition of the process wastewater, discharged to each drain;
    - iii. the flow rate and frequency of discharge to each drain; and
    - iv. the contact made in the process unit with hydrocarbons or oily wastewater by the process wastewater discharged to each drain.
  - operations not covered in request #13b., such as the ancillary downstream sewer lines, the oil-water separator, slop oil tank, or auxiliary equipment, including, but not limited to, the process wastewater flow rate transported, treated, and/or processed through each part of the system and the associated air pollution control equipment and practices.
  - d. Describe the water seal controls on each drain and the covers, seals or gaskets, and vent pipes on each junction box or manhole acting as a junction box.
  - e. Describe the inspection and maintenance practices, including inspection frequency and recordkeeping of such practices, for, but not limited to, fixed covers, seals, flanges, joints, gaskets, hatches, and plugs.

- f. State the date(s) that Texaco initiated a program to comply with the visual or physical inspection requirements contained in 40 C.F.R. §60.692-2 for the individual drain systems.
- g. Provide a process flow diagram of the associated refinery process, including the flow rates and materials entering the refinery process to the product, by-products or intermediates leaving the process, and the process unit discharging oily wastewater to each affected drain and through junction boxes and sewer lines up to the oil-water separator (including air pollution control equipment).
- h. Provide a copy of any performance source test reports for control equipment identified in response to this request #13.
- i. Submit a copy of each report that was submitted to the District or EPA pursuant to 40 C.F.R. § 60.698.
- j. Identify any drains that are out of active service.
  Indicate the location of that drain with plans or
  specifications and the type of seal or cover it has, if
  any.
- 14. Provide a copy of all documents relating to the NSPS Subparts A and QQQ requirements applicable or potentially applicable to any new, modified, or reconstructed parts of the refinery wastewater system at the facility. These documents include, but are not limited to, correspondence between the District and Texaco, a consultant or third party representing Texaco, correspondence between Texaco and its consultants or contractors, reports prepared by a consultant or contractor, and any internal documents at Texaco.
- 15. Identify all Claus sulfur recovery plants that process gases produced within the facility which were constructed, reconstructed, or modified between October 4, 1976, and January 1, 1988. The identifying information should include, among other things, the source identification number.
- 16. For each Claus sulfur recovery plant identified in response to request #15 or in response to request #10 of EPA's Section 114 letter dated October 19, 1994, indicate the amount of sulfur produced in long tons per day, the date on which construction, reconstruction, or any modification commenced, and, if applicable, the nature of any reconstruction or modification, and the pollution control

system used at the Claus sulfur recovery plant (e.g., an oxidation control system, a reduction control system followed by an incinerator, or a reduction control system not followed by incineration).

- 17. Provide a general description of the refinery flare system and process flow diagrams, including associated NSPS units.
- 18. List all flares that are used to comply with NSPS and provide the following information for each flare:
  - a. the type of flare (e.g., steam-assisted, nonassisted, or air-assisted);
  - b. the date that initial construction and any modifications commenced;
  - c. the type of pilot flame indicator and its installation date;
  - d. the net heating value of the gas combusted in the flare, as determined by the method specified in 40 C.F.R. § 60.18(f)(3);
  - e. the design and operational exit velocity of the flare in feet per second, as determined by the method specified in 40 C.F.R. § 60.18(f)(4), include all calculations and source test data;
  - f. copies of all visible emissions tests done under 40 C.F.R. Part 60, Appendix A, Reference Method 22;
  - g. if the flare is steam-assisted or nonassisted, the maximum permitted velocity as determined by the method specified in 40 C.F.R. § 60.18(f)(5); and
  - h. if the flare is air-assisted, the maximum permitted velocity as determined by the method specified in 40 C.F.R. § 60.18(f)(6).
- 19. For the Sulfur Recovery Units ("SRUs") or the flares at the facility, provide a copy of all documents since January 1, 1991, relating to: (i) any application by Texaco for a variance, or (ii) any District Notice or Finding of Violation. This includes, but is not limited to, Texaco's variance applications and supporting documents, any District analysis of the variance applications, any District inspection report(s) or Notice(s) or Finding(s) of Violation that preceded Texaco's variance applications, any correspondence between Texaco and the District regarding the

variance applications or the conditions at the facility that are the subject of the variance application, any documents that estimate or analyze the amount by which emissions from the facility exceed or have exceeded the emissions otherwise allowed under applicable District rules and/or permits and NSPS requirements, and any action by the District Hearing Board concerning the variance applications.

20. Provide a description of, and a copy of documents since January 1, 1991, relating to, all fees and penalties paid by Texaco to the District to resolve or settle any disputes relating to a variance or a Notice or Finding of Violation issued by the District for either the SRUs or the flares at the facility. This includes, but is not limited to, excess emission fees, permit fees, filing fees, civil penalties, and criminal penalties. Identify the amount paid, the date of payment, and the violation(s) or disputes the fee or penalty resolved.

Texaco shall submit its response to this request postmarked no later than April 19, 1996. The response must be signed by a responsible corporate official of Texaco. The information provided by Texaco may be used by the United States in administrative, civil, or criminal proceedings. If additional information is required, you may receive another information request pursuant to the Act or another environmental statute.

Texaco shall submit the requested information via certified mail with return receipt requested to the following address:

Mr. David P. Howekamp Director, Air and Toxics Division (A-1) U.S. Environmental Protection Agency 75 Hawthorne Street San Francisco, CA 94105

Attn: Nancy Rumrill (A-3-2)

You are advised that under Section 113(a) of the Act, Texaco's failure to provide any of the documents, data or information required by this letter may result in an Order requiring compliance, an Order assessing an administrative penalty, or a civil action seeking appropriate relief. Section 113(b) of the Act provides for the assessment of a civil penalty of \$25,000 per day for each violation of the Act. In addition, Section 113(c) of the Act provides for criminal penalties for knowingly making any false material statements in, or omitting material information from, any report filed under the Act.

You may, if you desire, assert a business confidentiality claim on behalf of Texaco covering part or all of the information provided to EPA in response to this letter. Any such claim for confidentiality must conform to the requirements set forth in 40 C.F.R. Part 2, especially § 2.203. You are advised that certain information may be made available to the public pursuant to 42 U.S.C. § 7414(c) and 40 C.F.R. § 2.301, notwithstanding a claim that such information is entitled to confidential treatment. If no claim of confidentiality is received with your reply, the information may be made available to the public without notice to Texaco.

This request for information is not subject to review by the Office of Management and Budget ("OMB") under the Paperwork Reduction Act because it is not an "information collection request" within the meaning of 44 U.S.C. §§ 3502(4) & (11), 3507, 3512, and 3518. Furthermore, it is exempt from OMB review under the Paperwork Reduction Act because it is directed to fewer than ten persons. 44 U.S.C. § 3502(4), (11); 5 C.F.R. § 1320.5(a).

If you have any questions regarding this request, please contact Nancy Rumrill at (415) 744-1139 or your attorney may call Robert Mullaney at (415) 744-1392. Thank you for your cooperation in this matter.

Sincerely,

David P. Howekamp

Director

Air and Toxics Division

cc: Mr. Armand Abay (Plant Manager, Texaco)

Mr. Robert Kard (SJVUAPCD)

Mr. James Boyd (CARB)

Mr. Ray Menebroker (CARB)



April 30, 1996

Direct: (213) 680-6436 jdragna@mdbe.com

### VIA FACSIMILE AND U.S. MAIL

Gavin McCabe, Esq.
United States Environmental Protection Agency
Region IX
Office of Regional Counsel
75 Hawthorne Street
San Francisco, California 94105

# Request for Information; Texaco Refining and Marketing Inc.

Dear Mr. McCabe:

I wanted to confirm in writing our telephone conversation of April 29, 1996 concerning the deadline for the submission of the response of Texaco Refining and Marketing Inc. to EPA's Request for Information dated April 5, 1996. You graciously agreed to extend the deadline to May 24, 1996. You also indicated that you would consider granting an additional extension upon future request in the event that additional time is necessary to respond fully to the information request.

Thank you very much for your consideration and cooperation. I look forward to working with you on this matter.

Sincerely yours.

cc: Ms: Anita Burke \*\*\*
Jennifer Gostanza, Esq

ATTORNEYS AT LAW

355 South Grand Avenue, Suite 4400 Los Angeles, California 90071-1560 Tel. (213) 680-6400 Fax (213) 680-6499 http://www.mccutchen.com

San Francisco Los Angeles San Jose Walnut Creek

Palo Alto Washington, D.C. Taipei



June 26, 1996

Direct: (213) 680-6436 jdragna@mdbe.com

## VIA FACSIMILE AND U.S. MAIL

Gavin McCabe, Esq.
Office of Regional Counsel
United States Environmental Protection Agency
EPA Region IX
75 Hawthorn Street
San Francisco, CA 94105

## Texaco Marketing and Refining Inc.; Request for Information

Dear Mr. McCabe:

This letter confirms our phone conversation of June 24, 1996 regarding the date on which Texaco Marketing and Refining Inc. ("Texaco") must submit its response to The Request for Information dated April 5, 1996.

You advised me that Ms. Lauren Volpini, the program manager responsible for this Request for Information (and the granting of any extensions), would be unavailable until late July. Pending her return, you agreed that an extension of the response deadline from June 28 to July 29 was appropriate and that you would recommend to Ms. Volpini that the extension be granted. Based on this conversation, it was agreed that Texaco would submit its response to the Request for Information on July 29, 1996.

Again, thank you for your cooperation. I look forward to discussing Texaco's response to the Request for Information.

Sincerely yours,

James Dragna

ATTORNEYS AT LAW

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San Francisco Los Angeles San Jose Walnut Creek Palo Alto Washington, D.C. Taipei



Judith A Wenker Senior Attorney

Texaco

10 Universal City Plaza Universal City CA 91608 1006 818 505 3004 FAX 818 505 3059

October 30, 1996

Nancy Marvel Regional Counsel U.S. Environmental Protection Agency Region IX 75 Hawthorne Street San Francisco, California 94105

Subject:

Self-Disclosure Pursuant to Final Policy Statement

published December 22, 1995, 60 FR 66706

#### To U.S. EPA:

Certain releases potentially subject to the federal emergency release reporting requirements1 have come to the attention of Texaco Refining and Marketing Inc.'s (Texaco's) Los Angeles Refinery management. Pursuant to the policy statement published December 22, 1995, 60 Federal Register 66706, Texaco's Los Angeles Refinery attaches to this letter a list of releases which may have been subject to federal emergency release reporting requirements. As a general statement, notice of a majority of these releases was made to the South Coast Air Quality Management District (SCAQMD), but not to federal and local emergency response personnel.

Pursuant to EPA policy, Texaco seeks to resolve any enforcement issues related to releases in the attached chart.

The applicability of the penalty mitigation policy to this disclosure is discussed below:

# Condition 1. Systematic Discovery:

The violation was discovered through:

- an environmental audit, or (a)
- an objective, documented, systematic procedure or practice reflecting the (b) regulated entity's due diligence in preventing, detecting, and correcting violations.

Texaco Response: This compliance issue came to the plant's attention during the course of an environmental health and safety audit conducted at the refinery during September 1996. Once the issue was raised during the course of the audit, the refinery staff

<sup>42</sup> USC § 9603, § 9611(g), 40 CFR Part 302 and 42 USC § 11004; 40 CFR § 355.40.

immediately embarked upon a full record review of all breakdowns it called into the SCAQMD (SCAQMD Rule 430) and all variances it sought from the SCAQMD over the past five years (California Health & Safety Code § 42350-42364.)

## Condition 2. Voluntary Discovery

The violation was identified voluntarily, and not through a legally mandated monitoring or sampling requirement prescribed by statute, regulation, permit, judicial or administrative order, or consent agreement.

<u>Texaco Response:</u> This violation was identified voluntarily pursuant to Texaco's corporate audit practices. Texaco's audit program is not mandated by statute, regulation, permit, judicial or administrative order, or consent agreement.

## Condition 3 Prompt Disclosure

The regulated entity fully discloses a specific violation within 10 days after it has discovered that the violation has occurred, or may have occurred, in writing to EPA.

Texaco Response: This compliance issue came to the plant's attention during the course of an environmental health and safety audit conducted at the refinery during September 1996. Once the issue was raised during the course of the audit, the refinery staff immediately embarked upon a full record review of all breakdowns it called into the SCAQMD and all variances it sought from the SCAQMD over the past five years. In order to complete the inventory of releases, the refinery recalled records from off-site storage, which added to the time necessary to complete the inventory. The refinery staff reviewed approximately 225 of releases for assessment of EPCRA release reporting applicability, another time-consuming task. Accordingly, this disclosure is being made as soon as practical, taking into consideration the complex nature of the task and the difficulty of assessing the applicability of the federal requirements.

# Condition 4. Discovery and Disclosure Independent of Government or Third Party Plaintiff

The violation must also be identified and disclosed by the regulated entity prior to governmental discovery.

<u>Texaco Response:</u> Texaco is not aware of any governmental investigation related to EPCRA release reporting at the Los Angeles Refinery. Therefore, this disclosure is made prior to governmental action or discovery.

## Condition 5. Correction and Remediation.

The regulated entity corrects the violation within 60 days, certified in writing that violations have been corrected, and takes appropriate measures.

<u>Texaco Response</u>: Via copy of this letter to the state and local emergency response agencies, Texaco seeks to correct this violation. Additionally, the refinery has revised its instructions to employees regarding the necessity of notifying the federal, state and local emergency response authorities in instances of breakdowns and variances.

#### Condition 6. Prevent Recurrence

The regulated entity agrees in writing to take steps to prevent a recurrence of the violation, which may include improvements to its environmental auditing or due diligence efforts.

<u>Texaco Response</u>: LAP has issued revised written instructions to employees regarding the necessity of notifying the federal, state and local emergency response authorities in instances of breakdowns and variances. These written instructions are expected to have the result of standardizing emergency release reporting and preventing a recurrence of the incidents.

## Condition 7. No repeat violations

The specific violation has not occurred previously. For purposes of this section, a violation is:

- (a) any violation of federal, state or local environmental law identified in a judicial or administrative order, consent agreement or order, complaint, or notice of violation, conviction or plea agreement; or
- (b) any act or omission for which the regulated entity has previously received penalty mitigation for EPA or a state or local agency.

<u>Texaco Response</u>: The refinery is not party to an administrative order, consent agreement, order, complaint, notice of violation, conviction, or plea agreement or previous penalty mitigation regarding EPCRA emergency release reporting.

#### Condition 8. Other Violations Excluded

The violation is not one which (1) resulted in serious actual harm, or may have presented an imminent and substantial endangerment to, human health or the environment, or (2) violates the specific terms of any judicial or administrative order, or consent agreement.

<u>Texaco Response</u>: Because a majority of these releases were reported to the local air agency and monitored by that agency, Texaco believes that they did not result in any serious actual harm or imminent and substantial endangerment to human health or the environment. Additionally, these releases did not violate the specific terms of any judicial or administrative order, or consent agreement.

### Condition 9. Cooperation

The regulated entity cooperates as requested by EPA.

<u>Texaco Response:</u> The refinery will cooperate with EPA if requested to do so.

In addition to the releases noted in the attachment Texaco is investigating a number of other potential emissions to determine if they were EPCRA or CERCLA reportable. This effort is being done on a top priority basis and you will receive a communication from us as soon as possible. Your careful consideration of this disclosure is appreciated. Please call me if you would like to discuss this matter further.

By copy of this letter to the local and state emergency agencies, Texaco requests that control numbers be issued for these releases. Additionally, Texaco seeks to resolve any related violations of state law related to these releases.

Sincerely,

Judith Wenker

Chemical Emergency Planning and Response Commission (CEPRC)

Local Emergency Planning Committee (LEPC)
California Office of Emergency Services (OES)

a a wenker

attachment

cc:

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#### Attachment

The following table contains information on seventy-five (75) releases from Texaco's Los Angeles Refinery. A description of the table is detailed below:

#### **General Information**

Date, Time and Duration: Date, time and duration of the release.

Excess Quantity (lbs): Amount released over the federally permitted limit, in pounds. If no federally permitted limit existed, then it indicates the total amount released. Excess quantity refers to the substance released (see Chemical column), unless more then one substance was released, in which case there will be an amount indicated for each chemical. Excess quantity for both SO<sub>x</sub> or NO<sub>x</sub> are not broken out by constituents (i.e., SO<sub>2</sub> and SO<sub>3</sub> or NO and NO<sub>2</sub>), instead excess quantity refers to the quantity of either SO<sub>x</sub> or NO<sub>x</sub> over the federally permitted limit.

Chemical: The substance released.

EHS?: Yes ("Y") indicates that the substance, or at least one of the substances, is on the list of Extremely Hazardous Substances found in 40 CFR Part 355 Appendix A.

Description: A short description of the release.

Actions Taken: Steps taken by Texaco or others in response to the release, including mitigation of the release and corrective actions to reach compliance.

#### SCAQMD Report

Date and Time: Date and Time that telephone or other verbal notification was made to the South Coast Air Quality Management District (SCAQMD).

Rule: SCAQMD rule, unless otherwise noted, that sets requirements or emission limits specifically related to the release.

Comments: Other comments or related information.

The following Notes are also used throughout the table:

Note (1): The release was in compliance with the federally approved RECLAIM emissions allocation for the facility and therefore may be considered to be federally permitted pursuant to 42 USC §9601(10).

Note (2): The release may have remained within refinery boundaries.
Note (3): The release was reported to SCAQMD pursuant to that agency's rules.
Note (4): The release was sanctioned by the variance order from the SCAQMD Hearing Board and that board's public notice requirements.
Note (5): SO2 emissions above permitted levels were within the 500 lbs SO2 RQ effective July 8, 1996.
Note (6): The exact quantity of the release cannot be determined at this time.

|         |          |           |                             |   | sc   | AQMD Rep   | ort   | Ī       |          |                             |                    |
|---------|----------|-----------|-----------------------------|---|------|--|---|---------|----------|-----------------------------|--------------------|
| Date    | Time     | Duration  | Excess<br>Quantity<br>(lbs) | Chemical                                      | EHS? | Description  | Actions Taken   | Date    | Time     | Rule                        | Comments           |
| 3/5/91  | 12:42 AM | 6 h 28 m  | 2318                        | Nitrogen dioxide<br>and nitric oxide<br>(NOx) |      | The water injection system on cogeneration units A and B shutdown automatically due to high conductivity in the water.   | Texaco personnel reduced the operating load to minimize excess emissions and immediately arranged for replacement of the demineralizer unit.                                  | 3/5/91  | 5:53 AM  | NSPS:<br>Subpart<br>GG, 203 | Note (3)           |
| 3/5/91  | 11:45 PM | 50 m      | 190                         | Nitrogen dioxide<br>and nitric oxide<br>(NOx) | Y    | Shutdown of the water injection system to the cogeneration units resulted from the electronic failure of the motorized butterfly valve on the portable demineralizer.  | Texaco operating personnel reduced the operating load to minimize excess emissions. Texaco personnel lined up the spare portable demineralizer and restarted water injection. | 3/6/91  | 12:15 AM | NSPS:<br>Subpart<br>GG, 203 | Note (3)           |
| 4/10/91 | 1:45 PM  | 13 h 45 m | 10                          | Sulfur dioxide                                | Y    | Hole in the piping of the sulfur vent blower system due to corrosion of the metal required shutdown of the blower system.  | Texaco personnel ceased the loading of trucks at the loading rack and sulfur movements to storage to minimize excess emissions and replaced the piping.                       | 4/10/91 | 2:05 PM  | 203                         | Note (3), Note (5) |
| 4/26/91 | 6:30 PM  | 45 m      | 190                         | Nitrogen dioxide<br>and nitric oxide<br>(NOx) | Y    | Malfunction of the main acid supply pump resulted in incomplete regeneration of the demineralizer catalyst bed. When the bed was put in service it did not treat water sufficiently and water injection to both cogeneration units shutdown. | Texaco personnel reduced operating load to minimize excess emissions, switched from NOx water storage tank A to storage tank B, reset and restarted water injection.          | 4/26/91 | 7:30 PM  | NSPS:<br>Subpart<br>GG, 203 | Note (3)           |
| 4/27/91 | 10:45 AM | 5 h 10 m  | 10                          | Sulfur dioxide                                | Y    | Drive belt failed on the spare sulfur vent blower which was in operation at the time. This resulted in loss of vapor recovery on T-603.  | The main vent blower was not available. Texaco personnel replaced the drive belt on both the main and spare blowers.  | 4/27/91 | 11:35 AM | 203                         | Note (3), Note (5) |

|         |          |          |                             | General  |      | sc  | AQMD Rep  | ort     |          |                                     |          |
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| Date    | Time     | Duration | Excess<br>Quantity<br>(lbs) | Chemical   | EHS? | Description   | Actions Taken   | Date    | Time     | Rule                                | Comments |
| 5/5/91  | 4:00 PM  | 18 h     | 18.5                        | Nitrogen dioxide<br>and nitric oxide<br>(NOx)      | Υ    | Failure of ammonia cylinder bank resulted in loss of ammonia injection to SCR at HTU#4.   | Texaco personnel replaced the ammonia bank and resumed injection of ammonia to the SCR.   |         | :        | 203                                 |          |
| 5/11/91 | 1:35 AM  | 40 m     | , ,,                        | Nitrogen dioxide<br>and nitric oxide<br>(NOx), ROG | Y    | DWP power failure resulted in<br>the loss of vapor recovery<br>compressors for 40 minutes<br>and loss of water injection to<br>Cogen A for 9 minutes. | Texaco personnel reduced operating load to minimize excess emissions and reset and restarted the water injection system.  | 5/11/91 | 2:20 AM  | NSPS:<br>Subpart<br>GG, 203,<br>463 | Note (3) |
| 5/21/91 | 1:17 PM  | 39 m     | 92                          | Nitrogen dioxide<br>and nitric oxide<br>(NOx)      | Y    | Failure of the motor slip guard on the fuel gas supply compressor resulted in automatic shutdown of water injection.                                  | Texaco operating personnel reduced operating load to minimize excess emissions and Electrical and Instrumentation specialists reset the control system and restarted water injection. | 5/21/91 | 3:20 PM  | NSPS:<br>Subpart<br>GG, 203         | Note (3) |
| 5/29/91 | 7:07 AM  | 53 m     | 300                         | Nitrogen dioxide<br>and nitric oxide<br>(NOx)      | Y    | Water injection system at both cogeneration units shutdown automatically as a result of an electronic trip.   | Texaco personnel reduced operating load to minimize excess emissions and reset and restarted the water injection system.  | 5/29/91 | 10:30 AM | NSPS:<br>Subpart<br>GG, 203         | Note (3) |
| 6/26/91 | 12:19 PM | 1 h 11 m | 195                         | Nitrogen dioxide<br>and nitric oxide<br>(NOx)      | Y    | Failure of water injection pump at Cogen B resulted in excess NOx emissions.  | Texaco personnel reduced the operating load to minimze excess emissions and claibrated the water injection controller and the electronic circuits.                                    | 6/26/91 | 1:15 PM  | NSPS:<br>Subpart                    |          |
| 7/8/91  | 5:24 PM  | 38 m     | 118                         | Nitrogen dioxide<br>and nitric oxide<br>(NOx)      | Y    | Electrical malfunction of the ratio controller for the Woodward water injection system at Cogen A.  | Texaco personnel reduced the operating load to minimize emcess emissions and reset the water injection controller and restarted the water injection.                                  | 7/8/91  | 6:00 PM  | NSPS:<br>Subpart<br>GG, 203         | Note (3) |

|         |          |           |                               | General  |      | sc  | AQMD Rep  | ort              |          |                             |  |
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| Date    | Time     | Duration  | Excess<br>Quantity<br>(lbs)   | Chemical   | EHS? | Description   | Actions Taken   | Date             | Time     | Rule                        | Comments   |
| 7/14/91 | 3:56 PM  | 2 h 4 m   | 355                           | Nitrogen dioxide<br>and nitric oxide<br>(NOx)                          |      | Electrical malfunction of the ratio controller for the Woodward water injection system at Cogen A.  | Texaco personnel reduced the operating load to minimize emcess emissions and reset the water injection controller and restarted the water injection.                      | 7/14/91          | 5:00 PM  | NSPS:<br>Subpart<br>GG, 203 | Note (3)   |
| 7/27/91 | 11:35 AM | 35 m      | 89                            | Nitrogen dioxide<br>and nitric oxide<br>(NOx)                          | Y    | Electrical malfunction of the ratio controller for the Woodward water injection system at Cogen A.  | Texaco personnel reduced the operating load to minimize emcess emissions and reset the water injection controller and restarted the water injection.                      | 7 <i>12</i> 7/91 | 12:10 PM | NSPS:<br>Subpart<br>GG, 203 | Note (3)   |
| 7/31/91 | 8;38 AM  | 1 h 32 m  | 265                           | Nitrogen dioxide<br>and nitric oxide<br>(NOx)                          | ,    | Failure of high stage valve on C-<br>128 resulted in a reduction in<br>Cogen B's production. This<br>reduction caused in an<br>"automatic fuel transfer" alarm<br>which shutdown water injection. | Texaco personnel blocked in the compressor and put a spare in service. Texaco personnel restarted the water injection to  | 7/31/91          | 9:25 AM  | NSPS:<br>Subpart<br>GG, 203 | Note (3)   |
| 8/9/91  | 1:36 AM  | 2 h 59 m  | 480                           | Nitrogen dioxide<br>and nitric oxide<br>(NOx)                          | Y    | High conductivity shutdown of the water injection system.   | Texaco E&I technician was called out to initiate a clearance sequence to reset the water injection system. The technician reset the system and restarted water injection. | 8/9/91           | 2:05 AM  | NSPS:<br>Subpart<br>GG, 203 | Note (3)   |
| 9/4/91  | 3:44 PM  | 1 h 17 m  | 248                           | Nitrogen dioxide<br>and nitric oxide<br>(NOx)                          |      | Electrical short resulted in shutdown of cogeration unit water injection.   | Texaco personnel restarted water injection.   | 9/4/91           | 4:17 PM  | NSPS:<br>Subpart<br>GG, 203 | Note (3)   |
| 9/26/91 | 5:30 PM  | 11 h 30 m | 30,000<br>(SO2); 200<br>(H2S) | Hydrogen<br>sulfide, sulfur<br>dioxide and<br>sulfur trioxide<br>(SOx) | Υ    | Power failure resulted in loss of the SRP.  | Texaco operations personnel reduced charge rates to operating units to minimum to minimize excess emissions.  | 9/26/91          | 6:00 PM  |                             | Fire Department was called and responded. Note (3) |

|          |          |          |                             | General  | ,    | SC   | AQMD Rep   | ort      |          |                              |            |
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| Date     | Time     | Duration | Excess<br>Quantity<br>(lbs) | Chemical   | EHS? | Description  | Actions Taken  | Date     | Time     | Rule                         | Comments   |
| 10/14/91 | 4:38 PM  | 42 m     | 380                         | Nitrogen dioxide<br>and nitric oxide<br>(NOx)  | Y    | Short in wiring for water injection pumps.   | Texaco electrical and instrumentation technicians removed and replaced failed wires. Operations personnel restarted the water injection pumps.   | 10/14/91 | 5:24 PM  | NSPS:<br>Subpart<br>GG, 203  | Note (3)   |
| 10/21/91 | 5:55 AM  | 2 h 5 m  | Note (6)                    | Sulfur dioxide<br>and sulfur<br>trioxide (SOx)   | Υ    | DWP power failure resulted in shutdown of several refinery units and high concentrations of H2S in refinery fuel gas.        | Texaco operations personnel restarted equipment once power was restored.   | 10/21/91 | 7:15 AM  | 431.1,<br>NSPS:<br>Subpart J | Note (3)   |
| 12/3/91  | 4:00 PM  | 13 h     | Note (6)                    | Nitrogen dioxide<br>and nitric oxide<br>(NOx), sulfur<br>dioxide and<br>sulfur trioxide<br>(SOx) | Y    | Stream high in H2S from<br>HGU#1 routed to the flare.<br>Potential for excess NOx from<br>HTU#4 during startup.              | Texaco instrumentation specialists inspected and repaired equipment which led to flaring of high H2S gas.  | 12/3/91  | 4:30 PM  | 431.1                        | Note (3)   |
| 12/4/91  | 6:45 AM  | 1 h 17 m | 180                         | Nitrogen dioxide and nitric oxide (NOx)  | Y    | Failure of the inlet water pressure switch on the water injection system at Cogen A resulted in the loss of water injection. | Texaco personnel reduced operating load to minimize excess emissions, repaired the pressure switch and reset and restarted water injection.      | 12/4/91  | 7:25 AM  | NSPS:<br>Subpart<br>GG, 203  | Note (3) . |
| 12/6/91  | 5:15 AM  | 1 h 30 m | 270                         | Nitrogen dioxide<br>and nitric oxide<br>(NOx)  | Y    | Low fuel gas pressure caused shutdown of Cogen A and loss of water injection on Cogen B.                                     | Texaco personnel reduced operating load to minimize excess emissions, reset and restarted the fuel gas compressor and restarted water injection. | 12/6/91  | 6:00 AM  | NSPS:<br>Subpart<br>GG, 203  | Note (3)   |
| 12/7/91  | 11:20 PM | 2 h 45 m | 487                         | Nitrogen dioxide<br>and nitric oxide<br>(NOx)  | Υ    | Failure of outboard seal on water injection pump for Cogen B led to loss of water injection.                                 | Texaco personnel reduced operating load to minimize excess emissions and replaced a fuse on the spare pump and placed the spare pump in service. | 12/8/91  | 12:15 AM | NSPS:<br>Subpart<br>GG, 203  | Note (3)   |

|         |         |                |                             | General  | Inform | nation  | ·   | sc              | AQMD Rep | ort   | <u></u>             |
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| Date    | Time    | Duration       | Excess<br>Quantity<br>(lbs) | Chemical                                       | EHS?   |   | Actions Taken   | Date            | Time     | Rule  | Comments            |
| 1/2/92  | 9:00 PM | 7 h            | 38928                       | Sulfur dioxide<br>and sulfur<br>trioxide (SOx) |        | South Erie City Boiler shutdown at SRP resulted in loss of steam and steam driven equipment. This caused the shutdown of SRP process units and loss of lean DEA circulation to LAP. |   | 1 <i>/2/</i> 92 | 9:30 PM  | NSPS:<br>Subpart J,<br><b>431.1</b> 7,<br>468 | Note (3)            |
| 1/18/92 | 4:45 PM | 25 m           | 74                          | Nitrogen dioxide<br>and nitric oxide<br>(NOx)  | Y      | Electrical malfunction involving<br>the Woodward ratio controller<br>resulted in shutdown of the<br>water injection at Cogen A.   | Texaco personnel immediately restarted water injection.   | 1/18/92         | 5:20 PM  | NSPS:<br>Subpart<br>GG, 203                   | Note (3)            |
| 1/31/92 | 7:25 PM | 35 m           | 80                          | Nitrogen dioxide<br>and nitric oxide<br>(NOx)  |        | Incomplete regeneration of demineralizer bed B resulted in the loss of treated water for water injection at Cogeneration units.   | Texaco operation personnel reset and restarted the water injection system for Cogen A. They also ordered a portable demineralizer and connected it to the system to supply treated water.         | 1/31/92         | 8:25 PM  | NSPS:<br>Subpart<br>GG, 203                   | Note (3)            |
| 2/1/92  | 2:00 PM | 4 <b>d 4</b> h | 360                         | Hydrogen sulfide<br>and sufur dioxide          | Y      | Sulfur Fire at SRP T-604. Fire extinguished at 2:10 PM. T-604 was without vapor recovery for an additional 4 days.  | Texaco needed approximately 4 days to complete inspection and repair. Texaco filed for and received a variance from SCAQMD. Indirect mitigation provided by reducing SO2 emissions from the FCCU. | 2/1/92          | 2:58 PM  | 401,<br>468(a) and<br>(b), 203                | Noter (3), Note (4) |
| 2/9/92  | 8:35 AM | 17 m           | 60                          | Nitrogen dioxide<br>and nitric oxide<br>(NOx)  | Y      | Incomplete regeneration of demineralizer bed B resulted in the loss of treated water for water injection at Cogeneration units.   | Texaco operation personnel reset and restarted the water injection system for Cogen A. They also ordered a portable demineralizer and connected it to the system to supply treated water.         | 2/9/92          | 8;35 AM  | NSPS:<br>Subpart<br>GG, 203                   | Note (3)            |

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| Date        | Time               | Duration           | Excess<br>Quantity<br>(lbs) | Chemical   | EHS? | Description  | Actions Taken  | Date    | Time     | Rule                           | Comments |
| 3/17/92     | 6:10 AM            | 1 h 15 m           | 179                         | Nitrogen dioxide<br>and nitric oxide<br>(NOx)  | Υ    | Water injection feed line at<br>Cogen A ruptured resulting in<br>loss of water injection.  | Texaco personnel shutdown the unit and replaced the ruptured line prior to restarting.   | 3/17/92 | 6:50 AM  | NSPS:<br>Subpart<br>GG, 203    | Note (3) |
| 3/18/92     | 5:00 PM            | 20 m               | Note (6)                    | Sulfur dioxide<br>and sulfur<br>trioxide (SOx)   | Y    | Instrument air failure caused HTU#3 to shutdown. PRV on high pressure separator relieved to the flare. This blew the seal pan, which caused flare recovery compressor to shut down.  | ·  | 3/19/92 | 5:00 PM  | 431.1                          | Note (3) |
| 4/11/92     | 5:34 AM            | 11 m               | 25.4                        | Nitrogen dioxide<br>and nitric oxide<br>(NOx)  | Y    | Electrical short caused loss of water injection to A Pac.  | Texaco operations personnal reduced the load to mitigate excess NOx emissions. Operations personnel restarted water injection within 11 minutes. | 4/11/92 | 6:00 AM  | 203,<br>NSPS:<br>Subpart<br>GG | Note (3) |
| 4/25/92     | - 6 <u>:</u> 10 PM | 1 h 30 m           | Note (6)                    | Sulfur dioxide<br>and sulfur<br>trioxide (SOx)   | Y    | Loss of flare gas recovery compressor C-137 during DCU blowdown.   | Texaco personnel repaired C-<br>137 and placed it back in<br>service.  | 4/25/91 | 7:00 PM  | 431.1                          | Note (3) |
| 4/30/92     | 7:35 AM            | "about 4<br>hours" | Note (6)                    | Nitrogen dioxide<br>and nitric oxide<br>(NOx), sulfur<br>dioxide and<br>sulfur trioxide<br>(SOx) | Y    | Fiberglass insulation on a section of the bus duct at substation #5 failed. This caused a power dip which resulted in loss of SCR's (potential excess NOx emissions) and loss of C-87 (flaring of gas in excess of 800 ppm H2S). | Texaco personnel immediately restarted affected SCR systems. The fiberglass insulation was replaced with an insulated and sheilded cable.        | 4/30/92 | 7:35 AM  | 401, 431.1                     | Note (3) |
| 5/12/92     | 11:45 AM           | 20 m               | ~60                         | Nitrogen dioxide<br>and nitric oxide<br>(NOx)  | Y    | Lost water injection to one cogeneration unit.   |  |         |          | NSPS:<br>Subpart<br>GG, 203    | ·        |
| 7/27/92     | 10:30 AM           | 1 h 30 m           | Note (6)                    | Hydrogen<br>sulfide, sulfur<br>dioxide and<br>sulfur trioxide                                    | ı Y  | Vent blower on T-1021 and T-<br>1032 failed when suction line<br>plugged. Spare blower not<br>available.   |  |         |          |                                |          |

|         |          |  | <del></del>  | General  |      | sc   | AQMD Rep  | oort    | :              |                                       |   |
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| Date    | Time     | Duration                               | Excess<br>Quantity<br>(lbs)                                | Chemical                                       | EHS? | Description  | Actions Taken   | Date    | Time           | Rule                                  | Comments  |
|         |          |  |  |  |      |  |   |         | ! <del></del>  |                                       |   |
|         |          |  |  |  |      |  |   |         |                |                                       | <u>.</u>  |
| 10/8/92 | 9:45 PM  | Unable to<br>determine at<br>this time | 168 (NOx);<br>1428 (SOx);<br>24615 (PM);<br>16958<br>(ROG) |  | ,    | HCU Explosion and fire. Loss of vapor recovery to tank farm.   | Texaco called a breakdown to SCAQMD and filed for and received a variance from SCAQMD.  | 10/8/92 | 9:50 PM        | 401,                                  | This event is believed to have been called in under EPCRA. Note (3), Note (4) |
| 4/12/93 | 2:46 PM  | 3 h 14 m                               |  | Nitrogen dioxide and nitric oxide (NOx)        |      | Mechanical failure of the coupling on the hydraulic oil pump which serves the Woodward water injection control valve for Cogen A.                | Texaco personnel reduced load to minimize excess emissions, replaced the coupling, and restarted the water injection system.              | ·       | by<br>15:46 PM | NSPS:<br>Subpart                      | Note (3)  |
| 4/27/93 | 12:45 PM | 2 h 30 m                               |  | Sulfur dioxide<br>and sulfur<br>trioxide (SOx) |      | Loss of power resulted in reduction in HTU#4 charge. This resulted in loss of hot DGO to FCCU which increased regenerator SOx emissions.         | Refinery circuit breakers<br>functioned correctly and cleared<br>the LADWP fault to minimize<br>disruption to operation.                  |         | by<br>1:45 PM  |                                       | Note (3), Note (5)  |
| 4/28/93 | 11:00 PM | 11 h                                   |  | Sulfur dioxide<br>and sulfur<br>trioxide (SOx) | Y    | HTU-4 shutdown resulted in the loss of hot DGO to the FCCU. This resulted in high SOx emissions at the FCCU due to the change in charge quality. | Texaco operations personnel reduced the FCCU charge rate. Operations personnel also added DeSOx catalyst to minimize excess SOx emissions | 4/28/93 | 11:15 PM       | 1105                                  | Note (5)  |
| 6/12/93 | 10:12 AM | 3 h 48 m                               |  | Sulfur dioxide<br>and sulfur<br>trioxide (SOx) |      | Failure of DCU wet gas compressor resulted in high H2S content in refinery fuel gas recovered from flare by C-137.                               | Texaco operations personnel reduced the DCU charge rate, increased DEA to absorber tower and finally shut down C-137.                     | 6/12/93 | 10:51 AM       | 431.1,<br>NSPS:<br>Subpart J          |   |
| 6/28/93 | 9:15 AM  | .~3 h                                  | . 1200   | Sulfur dioxide<br>and sulfur<br>trioxide (SOx) | Y    | Power failure resulted in loss of several refinery units.  | Refinery safety systems worked correctly to automatically and safely shut down operating units.   | 6/28/93 | 9:20 AM        | 431.1,<br>NSPS:<br>Subpart J,<br>1105 | Note (3)  |

| <del></del> |          |           |                             | General                                       | ·    | sc   | AQMD Rep  | ort      |          |                              |                                 |
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| Date        | Time     | Duration  | Excess<br>Quantity<br>(lbs) | Chemical                                      | EHS? | Description  | Actions Taken   | Date     | Time     | Rule                         | Comments                        |
| 12/13/93    | 11:45 AM | 26 h 55 m | 40                          | Nitrogen dioxide<br>and nitric oxide<br>(NOx) | Υ    | High vibration on SCR induced draft fan motor at H-304 led to shutodown of the fan. Flue gas bypassed the SCR.   | Texaco operations personnel reduced charge rate to the unit. Maintenance personnel repaired the motor and placed it back in service.                    | 9/13/93  | 12:02 PM | 1109                         | Note (3)                        |
| 12/17/93    | 10:04 AM | ~2h       | 216                         | Sulfur dioxide<br>and sulfur<br>trioxide      | Υ    | Plugged regulator and malfunction of level transmitter at HCU amine tower led to high H2S in fuel gas.   | Texaco personnel removed and replaced the regulator.  | 12/17/93 | 11:30 AM | 431.1,<br>NSPS:<br>Subpart J | Note (3), Note (5)              |
| 12/20/93    | 2:45 PM  | 1 h 15 m  | Note (6)                    | Sulfur dioxide<br>and sulfur<br>trioxide      | Y    | Malfunction of control valve on #200 unit at Sulfur Recovery Plant led to high concentrations of H2S in lean amine sent to plant and resulted in high H2S in fuel gas. | Texaco personnel bypassed and later replaced the control valve. Once repaired operations personnel put the valve back in service.                       | 12/20/93 | 3:30 PM  | 431.1,<br>NSPS:<br>Subpart J | Note (3)                        |
| 12/27/93    | 2:40 PM  | ~ 2 h     | 160                         | Sulfur dioxide<br>and sulfur<br>trioxide      | Y    | Malfunction of a level control valve on HCU amine tower caused a carryover of DEA which led to high H2S in fuel gas.   | Texaco personnel immediately removed and replaced the control valve.  | 12/27/93 | 3:23 PM  | 431.1,<br>NSPS:<br>Subpart J | Note (3), Note (5)              |
| 3/23/94     | 11:15 PM | < 1 d     | 280                         | Sulfur dioxide<br>and sulfur<br>trioxide      | Υ    | FCC Startup. Unit shutdown due to a malfunction of the J-1 blower on 3/15/94.  | Texaco called in a breakdown on 3/15/94 and filed for variance for startup on 3/17/94 and was granted varaince protection on 3/22/94.                   | 3/17/94  |          | 1105                         | Note (1), Note (4),<br>Note (5) |
| 5/19/94     | 11:50 AM | 1 h       | 112                         | Sulfur dioxide<br>and sulfur<br>trioxide      | Y    | Failure of CO boiler feedwater pumps resulted in excess emissions from FCCU regenerator.   | Texaco operations personnel attempted to restart the boiler feedwater pumps. When this was unsuccessful the CO boiler was shutdown and later restarted. | 5/19/94  | 3:45 PM  | 1105                         | Note (1), Note (3),<br>Note (5) |

|                     |          |          |                             | General                                       |      | sc  | AQMD Rep   | ort      |          |                             |   |
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| Date                | Time     | Duration | Excess<br>Quantity<br>(lbs) | Chemical                                      | EHS? | Description   | Actions Taken  | Date     | Time     | Rule                        | Comments  |
| 7/18/94             | 6:05 PM  | 19 h     | 54.5                        | Nitrogen dioxide<br>and nitric oxide<br>(NOx) | Y    | High differential pressure across the flow meter in H-200/1/2 SCR system due to pluggage resulted in automatic bypass of SCR.   | Texaco personnel steamed the flow meter to remove plugging and put the SCR back in service immediately thereafter.   | 7/18/94  | 6:58 PM  | 1109                        | Note (1), Note (3)  |
| 8/1/94              | 6:27 AM  | ~ 12 d   | 109                         | Nitrogen dioxide<br>and nitric oxide<br>(NOx) | Y    | Induced draft fan on H-100<br>SCR failed. No spare was<br>available.  | Texaco filed for emergency variance on 8/2/94. This was granted ex parte on 8/3/94 and by the board on 8/4/94. A replacement motor was obtained and in operation by 8/13/94.   | 8/2/94   | 6:27 AM  | 1109                        | Note (1), Note (3),<br>Note (4)   |
| 8/24/94             | 9:46 PM  | 48 m √   | 252                         | Sulfur dioxide<br>and sulfur<br>trioxide      | Y    | Loss of amine booster pump caused loss of DEA circulation which resulted in high H2S in fuel gas. The booster pump failed due to an electrical problem.   | Texaco personnel put a functionally identical pump in service within 1 hour of the failure of the booster pump.  | 8/24/94  | 10:10 PM |                             | Note (1), Note (3),<br>Note (5)   |
| 9/6/94 <sup>°</sup> | 7:18 AM  | 32 m     | 71                          | Nitrogen dioxide<br>and nitric oxide<br>(NOx) | Y    | Operator shutdown the main water injection pump upon noticing the pumps lube oil was contaminated and attempted to start a spare pump. The spare pumps main breaker tripped during the first startup attempt resulting in loss of water injection to Cogen A. | Texaco personnel repaired the main breaker for the spare pump and restarted the spare pump.  | 8/6/94   | 8:05 AM  | NSPS:<br>Subpart<br>GG, 203 | Note (1), Note (3)  |
| 10/22/94            | 12:43 AM | 7 m      | 57                          | Sulfur dioxide<br>and sulfur<br>trioxide      | . Y  | Loss of instrument air resulted in the claus tail gas diverter valve failing open. This in turn routed tail gas to incinerators F-704 and F-754.  | Texaco personnel immediately started a spare compressor. Texaco also investigated the loss of instrument air and determined that burnt electrical contacts on compressor C-144 caused the problem. The contacts were replaced. | 10/22/94 | 1:30 AM  | 401, 468?                   | Excess emissions from the incinerators may not have exceeded Rule 468. If not, then not reportable under EPCRA/CERCLA. Note (1), Note (3), Note (5) |

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| Date                                   | Time     | Duration  | Excess<br>Quantity<br>(lbs)   | Chemical   | EHS? | Description  | Actions Taken   | Date     | Time     | Rule                                      | Comments                        |
| 11/4/94                                | 5:30 AM  | 21 h 30 m |                               | Nitrogen dioxide<br>and nitric oxide<br>(NOx)  |      |  | Texaco personnel located the problem and replaced the failed overload relay.  | 11/4/94  | 7:10 AM  | 1109                                      | Note (1), Note (3)              |
| 11/14/94                               | 10:30 AM | 4 h       |                               | Sulfur dioxide<br>and sulfur<br>trioxide   |      | Failure of instrumentation and plugging of feed screen on DEA feed pump P-829 at Bensat Unit resulted in high H2S levels in refinery fuel gas.   |   | 11/14/94 | 10:52 AM |   | Note (1), Note (3),<br>Note (5) |
| 12/5/94                                | 12:15 PM | 21 h 5 m  | 35                            | Nitrogen dioxide<br>and nitric oxide<br>(NOx)  | Y    | temperature. This required   | Texaco maintenance personnel removed and inspected the bearings and corrected the clearance between the fan shaft and seal plate.   | 12/5/94  | 1:10 PM  | 1109, 203                                 | Note (1), Note (3)              |
| 1/4/95                                 | 4:00 PM  | 23 h 0 m  | 100 (SOx);<br>1500 (ROG)      | 1  | Y    | Loss of power caused several shutdowns within refinery.  | Texaco personnel restarted the affected units when power was returned.  | 1/4/95   | 4:30 PM  |   | Note (1), Note (3),<br>Note (5) |
|  |          |           | 1100 (NOx);<br>10900<br>(SOx) | Nitrogen dioxide and nitric oxide (NOx) and sulfur dioxide and sulfur trioxide (SOx) |      | A power outage to the SRP resulted in high H2S concentrations in the fuel gas. Also, the nine SCRs were by passed to prevent catalyst damage. Lastly, vapor recovery blowers were were inoperable. | Portable generators provided temporary electricity. Utility worked 48 hours continuously before restoring power. Refinesy unit charge rates were reduced to reduce fuel use. Cogen units were operated on 100% purchased natural gas. | 1/25/95  | 7:11 AM  | 401,<br>431.1,<br>1105,<br>1109,<br>NSPS: | Note (1), Note (3)              |

|          |          |              |                             | General   |      | sc  | AQMD Rep  | ort      |            |                                |                                 |
|----------|----------|--------------|-----------------------------|---|------|---|---|----------|------------|--------------------------------|---------------------------------|
| Date     | Time     | Duration     | Excess<br>Quantity<br>(lbs) | Chemical  | EHS? | Description   | Actions Taken   | Date     | Time       | Rule                           | Comments                        |
| 3/24/95  | 10:42 AM | id4h 14<br>m | 94 (NOx)                    | Nitrogen dioxide<br>and nitric oxide<br>(NOx) and sulfur<br>dioxide and<br>sulfur trioxide<br>(SOx) | Y    | Compressor breakdowns in hydrogen generation unit caused: 1. hydrocracking unit heater to bypass SCR (raising NOx emissions), and 2. hydrotreating unit to shut down (incrreasing SOx emissions from Fluid Catalytic Cracker (FCCU)). | 1. Heater fired at minimum rate and temp < 550 deg. F. to minimize NOx 2. Texaco personnel reduced the FCCU charge rate and added desox catalyst to minimize SOx. Texaco personnel later repaired the compressors and returned them to service. | 3/24/95  | · 11:40 AM | 1109<br>(NOx)<br>1105<br>(SOx) | Note (1), Note (3)              |
| 3/31/95  | 5:53 AM  | 8 h 30 m     | 20                          | Nitrogen dioxide<br>and nitric oxide<br>(NOx)   | 4    | Operational changes were necessitated due to loss of oxygen from a supplier, including shutdown of an SCR on one heater.  Malfunction in delayed coking   | Heater fired at minimum rate and temperature kept < 550 degress Fahrenheit during SCR shutdown.   | 3/31/95  | 6:49 AM    | 1109                           | Note (1), Note (3)              |
| 4/24/95  | 2:00 PM  | 22 h 0 m     | 90                          | Sulfur dioxide<br>and sulfur<br>trioxide  | Υ    | unit caused a gas stream<br>containing > 800 ppm H2S to<br>be sent to flare.  | Texaco personnel immediately fabricated and replaced the malfunctioning components.   | 4/24/95  | 2:45 PM    | 431.1                          | Note (1), Note (3),<br>Note (5) |
| 5/5/95   | 12:46 AM | 15 h 15 m    | 88                          | Nitrogen dioxide<br>and nitric oxide<br>(NOx)   | Y    | SCR forced draft fan malfunctioned  | Texaco personnel shut down<br>the SCR, repaired the fan, and<br>returned the SCR to service.  | 5/5/95   | 1:15 AM    | 1109                           | Note (1), Note (3)              |
| 5/22/95  | 10:40 AM | 10 h 12 m    | 21                          | Nitrogen dioxide<br>and nitric oxide<br>(NOx)   | Y    | SCR induced draft fan malfunctioned.  | Texaco personnel shut down the SCR, repaired the fan, and returned the SCR to service.  | 5/22/95  | 11:00 AM   | 1109                           | Note (1), Note (3)              |
| 9/27/95  | 9:05 AM  | 11 h 30 m    | 44                          | Nitrogen dioxide<br>and nitric oxide<br>(NOx)   | Y    | SCR on Crude Unit heater<br>bypassed to enable<br>maintenance of plugged air<br>preheater.  | Texaco personnel water washed the air preheater to remove pluggage and returned the SCR to service.   |          | 9:45 AM    | 1109                           | Note (1), Note (3)              |
| 10/18/95 | 8:10 AM  | 10 h 50 m    | 41                          | Nitrogen dioxide<br>and nitric oxide<br>(NOx)   | Υ    | Induced draft fan in SCR<br>malfunctioned and SCR<br>bypassed to enable repair.   | Texaco personnel repaired the fan and returned the SCR to service.  | 10/18/95 | 8:55 AM    | 1109                           | Note (1), Note (3)              |

|    |         |         |                  | <u> </u>                     | General   |      | SC  | AQMD Rep  | ort      |          |                                      |   |
|----|---------|---------|------------------|------------------------------|---|------|---|---|----------|----------|--------------------------------------|---|
|    | Date    | Time    | Duration         | Excess<br>Quantity<br>(lbs)  | Chemical  | EHS? | Description   | Actions Taken   | Date     | Time     | Rule                                 | Comments  |
| 1  | 1/24/95 | 6:50 AM | 12 h 10 m        | 587 (NOx);<br>10817<br>(SOx) | Nitrogen dioxide<br>and nitric oxide<br>(NOx) and sulfur<br>dioxide and<br>sulfur trioxide<br>(SOx) |      | A power failure in the SRP caused elevated H2S levels in refinery fuel gas. All SCRs were bypassed to prevent catalyst poisoning. | Texaco personnel shutdown HTU #4 and CRU #2 and one cogen unit, reduced charge rates to other units, and switched feed to low sulfur crude to reduced emissions. The remaining cogen operated on natural gas. | 11/24/95 |          | 1105, 401,<br>431.1,<br>NSPS:        | Note (1), Note (3).<br>EPCRA and<br>CERCLA notification<br>and follow-up were<br>completed.       |
| 1: | 2/26/95 | 2:15 PM | 7 h 0 m          | 16                           | Nitrogen dioxide<br>and nitric oxide<br>(NOx)   | Υ    | SCR induced draft fan malfunctioned   | Texaco personnel shut down the SCR, repaired the fan, and returned the SCR to service.  | 12/26/95 | 3:15 PM  | 1109                                 | Note (1), Note (3)  |
| 1  | /27/96  | 6:30 AM | 5 d 18 h 30<br>m | 920                          | Nitrogen dioxide<br>and nitric oxide<br>(NOx)   | Y    | Induced draft fan on an SCR<br>malfunctioned and the SCR<br>was shut down   | Texaco personnel replaced the fan and returned the SCR to service. Texaco personnel also filed for an emergency variance 1/30/96. See variance 1146-196.  | 1/27/96  | 7:05 AM  | 1109                                 | Includes excess<br>emissions from<br>SCAQMD variance<br>1146-196. Note (1),<br>Note (3), Note (4) |
|    | 2/1/96  | 3:20 PM | 1 h 10 m         | 70                           | Sulfur dioxide<br>and sulfur<br>trioxide  | Υ    | Untreated off-gas stream routed to flare until repairs could be made to plugged amine regulator.                                  | Texaco personnel made repairs and re-routed off-gas to amine system.  | 2/1/96   | 4:12 PM  | 431.1                                | Note (1), Note (3),<br>Note (5)   |
|    | 3/15/96 | 9:00 AM | 20 m             | 56.3                         | Sulfur dioxide<br>and sulfur<br>trioxide  | Y    | Loss of lean amine transfer pump at SRP. H2S excursion was approximately 20 minutes.  | Operators restarted the pump within 10 minutes. Texaco added a low flow alarm for lean amine supply to refinery to the control indicators for SRP operators.  | 3/15/96  | 10:00 AM | 401,<br>431.1,<br>NSPS:<br>Subpart J | Note (1), Note (3),<br>Note (5)   |
|    | 4/18/96 | 6:55 PM | 22 h 46 m        | 299.9                        | Nitrogen dioxide<br>and nitric oxide<br>(NOx)   | Y    | Electrical short caused a shutdown of the SCR for CRU No. 3 heaters.  | Texaco E&I technicians replaced the malfunctioning equipment and Operations restarted the SCR.  | 4/18/96  | 7:50 PM  | 1109                                 | Note (1), Note (3)  |

| General Information |          |           |                             |   |      |   |  | SCAQMD Report |         |                  | l l   |
|---------------------|----------|-----------|-----------------------------|---|------|---|--|---------------|---------|------------------|---|
| Date                | Time     | Duration  | Excess<br>Quantity<br>(lbs) | Chemical                                      | EHS? | Description   | Actions Taken  | Date          | Time    | Rule             | Comments  |
| 5/17/96             | 12:45 AM | 1 h 15 m  | 54                          | Nitrogen dioxide<br>and nitric oxide<br>(NOx) | Y    | Corroded contacts on pressure switches which control water injection to Cogen B prevented initiation of water injection upon startup. | Texaco machinist/electrician on duty bypassed the permissive that was preventing the initiation of water injection. Texaco personnel later replaced the corroded contacts. | 5/17/96       | 1:20 AM | •                | Note (1), Note (3).<br>EPCRA and<br>CERCLA notification<br>and follow-up were<br>completed. |
| 6/20/96             | 8:20 AM  | 17 h 15 m | 105                         | Nitrogen dioxide<br>and nitric oxide<br>(NOx) |      | Malfunction (air preheater plugging) caused an SCR to be shut down until repairs were made.   | Texaco personnel made the repair (preheater water wash) and restarted the SCR. Contractor reviewed the SCR design to assure future compliance with applicable rules.       | 6/20/96       | 8:40 AM | 1109             | Note (1), Note (3)  |
| 7/14/96             | 7:30 PM  | 24 h      | 3000                        | Nitrogen dioxide<br>and nitric oxide<br>(NOx) |      | Water injection to Cogen A and B shutdown due to high pressure in the water injection pumps.  | Texaco operating personnel reduced load on both units to minimize excess emissions.  | 7/14/96       | 7:40 PM | NSPS:<br>Subpart | Note (1), Note (3). EPCRA and CERCLA notification and follow-up were completed.             |
| 8/16/96             | 12:30 AM | 22 h      | 3000                        | Nitrogen dioxide<br>and nitric oxide<br>(NOx) |      | Hydraulic pump which supplies<br>water to Cogen B water injection<br>system failed.   |  | 8/17/96       | 5:30 AM | Subpart          | Note (1), Note (3). EPCRA and CERCLA notification and follow-up were completed.             |
| 8/28/96             | 6:45 AM  | 21 h 15 m |                             | Sulfur dioxide<br>and sulfur<br>trioxide      |      | Edison power failure resulted in loss of electricity at SRP. TGTU offgas was routed to incinerator F-704.                             | Texaco personnel routed tailgas to the incinerator.  | 8/28/96       | 7:45 AM |                  | Note (1), Note (3).<br>EPCRA and<br>CERCLA notification<br>and follow-up were<br>completed. |

# ROUTE SLIP

RE:

Texaco Refinery, Bakersfield Request for Information EPCRA/CERCLA 103 Investigation

Lauren Volpini Originater

Gavin McCabe

Concurrence Inside

Peter Orth

Section Chief

Concurrence Inside

Don White

\_\_\_Branch-Chief

Signature On Letter

Sandy Farber Administrative

Duplication (5 copies\*), Mail Orginal, Return Folder to

Volpini

\*Please route copies to 1) Gavin McCabe RC-3, 2) Nancy Rumrill (AMD), 3) Mary Wellsing (SAIC), 4) Ralph Huey, HazMat Coord., Bakersfield Fire Department, 1715 Chester Ave, 3rd Floor, Bakersfield, CA 93301,5) Volpini File Copy